

Program Increment 4 Objectives

NO ISSUE - Nothing is impeding progress on this objective. It is expected to complete in the PI.

WARNING - Team is being slowed by a problem which, if not resolved, could prevent this objective from completing during the PI.

ISSUE - Issue has been encountered which prevents this objective from completing during the PI.

EED COMPLETE - All EED work is complete on this objective, but additional work needs to be done by an external group for the entire objective to work. (DAAC Installation, Provider Testing, etc.)

COMPLETE - Objective is complete and deployed in OPS.

Rank	Capability	Objective	PI Status	Notes	Team
Carry Over	Access Control and Group Cutover	Legacy services will read and write ACLs to Access Control Service in SIT	COMPLETE	Objective from last PI. ACL and Group Read/Write are now cutover in SIT and also UAT.	CMR
1	CMR in the Cloud - UAT	Stand up the CMR UAT NGAP environment.	COMPLETE		CMR Cloud
1	CMR in the Cloud - UAT	Cut over operations from on-premises SIT to the CMR SIT NGAP environment.	COMPLETE	Pre-requisite for cutting over UAT.	CMR Cloud
1	CMR in the Cloud - UAT	As an operator, I want to monitor and administer CMR in NGAP.	COMPLETE	Pre-requisite for cutting over UAT.	CMR Cloud
1	CMR in the Cloud - UAT	Cut over operations from on-premises UAT to the CMR UAT NGAP environment.	COMPLETE		CMR Cloud
1	CMR in the Cloud - UAT	Support bamboo deploying CMR to NGAP	COMPLETE	UAT builds have been created and tested. Ops builds have been created.	Bamboo NGAP
1	CMR in the Cloud - UAT	Bamboo will have support for enforcing compliance checks for CMR.	COMPLETE		Bamboo NGAP
1	CMR in the Cloud - UAT (and Cumulus and GITC)	Bamboo will support web application scanning compliance checks.	COMPLETE	We've successfully switched to using ZAP in Bamboo for this. We still need to put it in place for individual projects and add support in NGAP using the AWS ECS.	Bamboo NGAP
1	CMR in the Cloud - UAT (and Cumulus and GITC)	Bamboo will have support for enforcing STRAW Inventory compliance checks.	COMPLETE	We support this. It has not be added to Cumulus yet but this is a very minor task and by the wording of the objective we are complete.	Bamboo NGAP
2	CMR in the Cloud - OPS	Perform workload runs including ingest and search to verify that CMR in NGAP performs well enough to replace our current operational environment.	NO ISSUE		CMR Cloud
2	CMR in the Cloud - OPS	Stand up the CMR OPS NGAP environment.	NO ISSUE		CMR Cloud
3	NGAP Sandbox MVP	Application owners can deploy an application to a sandbox environment	COMPLETE	Certificates procured and installed.	NGAP
3	NGAP Sandbox MVP	Application owners can deploy 3rd party containers to a sandbox environment	COMPLETE	Final end-to-end integration test with Bamboo scanning completed 3/31.	NGAP

4	Cumulus SIT: on-Board onto NGAP	As ESDIS, I need Cumulus to be "on boarded" in NGAP so I may assess feasibility of NASA-compliant cloud archives	ISSUE	<p>Warning due to DevSeed not providing deployable code in planned sprint and not being able to re-use GITC deployment work as expected due to diverging architectures.</p> <p>Criteria:</p> <ul style="list-style-type: none"> Log forwarding to ED Splunk Cumulus ingests external data from within Private NGAP environment Deploy tasks for Bamboo based on CF templates and scripts 	GIBS / Cumulus
4	Cumulus SIT: on-Board onto NGAP	As ESDIS, I want to be able to deploy SIT environment for Cumulus to NGAP	ISSUE	<p>See above.</p> <p>Criteria:</p> <ul style="list-style-type: none"> Bamboo deployment with scanning and compliance tasks included in private deployment Promotion logic in Bamboo CI/CD for public deployment and scan Cumulus dashboard publicly accessible with VPN restrictions All acceptance criteria from Cumulus on boarding met 	GIBS / Cumulus
4	Cumulus SIT: on-Board onto NGAP	Support building and testing Cumulus in Bamboo	ISSUE	See above.	Bamboo NGAP
4	Cumulus SIT: on-Board onto NGAP	Support bamboo deploying Cumulus to NGAP	ISSUE	See above.	Bamboo NGAP
4	Cumulus SIT: on-Board onto NGAP	Bamboo will have support for enforcing compliance checks for Cumulus.	ISSUE	See above.	Bamboo NGAP
5	GITC SIT: on-Board onto NGAP	As ESDIS, I need GIBS (GITC) to be "on boarded" in NGAP so I may assess feasibility of NASA-compliant ingest and tile retrieval	ISSUE	<p>Warning based on CloudWatch logging not yet being sent to Splunk.</p> <p>Criteria:</p> <ul style="list-style-type: none"> Log forwarding for OnEarth and Serverless CloudWatch logging to ED Splunk Log forwarding will be coordinated between NGAP and EI teams in PI-5. No further action for GIBS team. GIBS ingests VIIRS data and additional types based on existing handlers GIBS processes and archives MRFs in S3 bucket(s) GIBS provides tile retrieval from NGAP endpoints via WMTS and TWMS Deploy tasks for NGAP PaaS container deployment and AWS CF based deployments 	GIBS / Cumulus
5	GITC SIT: on-Board onto NGAP	As ESDIS, I want to be able to deploy SIT environment for GITC to NGAP	ISSUE	<p>Expecting completion by Friday.</p> <p>Criteria:</p> <ul style="list-style-type: none"> Bamboo deployment with scanning and compliance tasks included in private deployment Promotion logic in Bamboo CI/CD for public deployment and scan Public endpoints with TLS configured for tile retrieval Deploys to NGAP UAT, which is not publicly accessible due to fixes that have not been propagated to production. Will deploy to production NGAP next week after fixes propagate and therefore have a public endpoint with TLS Independent deployment of NGAP PaaS application instance for WorldView All acceptance criteria from GITC on boarding met 	GIBS / Cumulus
5	GITC SIT: on-Board onto NGAP	Support building and testing GITC in Bamboo	COMPLETE		Bamboo NGAP

5	GITC SIT: on-Board onto NGAP	Support bamboo deploying GITC to NGAP	COMPLETE		Bamboo NGAP
5	GITC SIT: on-Board onto NGAP	Bamboo will have support for enforcing compliance checks for GITC.	COMPLETE		Bamboo NGAP
6	End-To-End Services: Prototype EDSC Workflow	Deliver a prototype (with stub data) of new parameter subsetting workflow.	COMPLETE	Demo'd prototype at end of PI demos.	EDSC
7	Provide SMAP-S Data Services	Deliver any required service updates to support SMAP Sentinel data.	ISSUE	Did not receive data in time for this to complete during this PI.	L1-L2
7	Provide SMAP-S Data Services	Develop updates for SMAP backlog NCRs as defined by an NSIDC approved NCR list	NO ISSUE	Completed additional work on this PI while waiting to receive data on the SMAP-S objective above.	L1-L2
8	ICESat-2 L1/L2 Param & Spatial Subset	For ICESat-2 Subsetter – Develop basic spatial subsetter for ATL04 (and any other compliant collections)	NO ISSUE		L1-L2
8	ICESat-2 L1/L2 Param Subset, All Non-Gridded	Prepare long-term plan for ICESat-2 L1-L2-L3a data services	COMPLETE		L1-L2
8	ICESat-2 L1/L2 Param Subset, All Non-Gridded	Prepare technical plan for subsetting photon data in ICESat-2 ATL03 data	COMPLETE		L1-L2
9	VIIRS Low Level Data Services	Add VIIRS low level data services EMU programatic access URLs to visualization page.	NO ISSUE		SG
9	VIIRS Low Level Data Services	Assess VIIRS L2 (VNP10 and VNP30) data for HEG services required to proceed with subsequent task.	ISSUE	There is no reference for the name of granules containing lat/lon fields in the data granules. Without that we are not be able to get the lat/lon for swath data. Waiting on further sample data to complete this analysis.	L3/L4
9	VIIRS Low Level Data Services	Prototype HEG services for VIIRS L2 (VNP10 and VNP30) data by April 1. This should include subsetting, reformatting and reprojection. NOTE: This prototype should function with the sample data we have today.	COMPLETE	The prototype was completed supporting VNP10, VNP30, and VNP14.	L3/L4
9	VIIRS Low Level data services	To present a usable form allowing the user to select format type, projection and subset options. This functionality will be delivered at the end of this program increment	NO ISSUE		ConfigTools
10	Onboarding Workflow	Application owners can provide their application's information, architecture, service needs, and feature needs to NGAP via an application.	COMPLETE		NGAP
10	Onboarding Workflow	Application owners can obtain the NGAP Docker "base container" via an application once they have entered some basic application information.	ISSUE	Certificates came too late to be installed. Some work remains.	NGAP
10	Onboarding Workflow	Identify ways to make Bamboo build, scan, and deployment more generic for a future PI.	COMPLETE	Analyzed bamboo and added issues for improving in the future.	Bamboo NGAP
11	PUMP Shutdown	Deploy all order options functionality to UAT to enable PUMP shutdown.	COMPLETE	Currently in UAT. Ready to deploy to Prod once we decide to make this functionality available in ops.	MMT
11	PUMP Shutdown	Grant collection and granule permissions based on access constraint value to enable PUMP shutdown.	COMPLETE	Currently in UAT. Ready to deploy to Prod once we decide to make this functionality available in ops.	MMT

11	PUMP Shutdown	Deploy Manage Service Option Definitions functionality to UAT to enable PUMP shutdown.	COMPLETE	Currently in UAT. Ready to deploy to Prod once we decide to make this functionality available in ops.	MMT
11	PUMP Shutdown	Deploy Manage Service Entries functionality to UAT to enable PUMP shutdown.	COMPLETE	Currently in UAT. Ready to deploy to Prod once we decide to make this functionality available in ops.	MMT
11	PUMP Shutdown	Deploy Manage Service Option Assignments functionality to UAT to enable PUMP shutdown.	COMPLETE	Currently in UAT. Ready to deploy to Prod once we decide to make this functionality available in ops.	MMT
11	PUMP Shutdown	Deploy Order tracking functionality to UAT to enable PUMP shutdown.	NO ISSUE	Currently in UAT. Ready to deploy to Prod once we decide to make this functionality available in ops.	MMT
11	PUMP Shutdown	Use Status App in both EDSC and Reverb to enable PUMP shutdown.	COMPLETE	EDSC & Reverb now both use ECHO Calendar and Earthdata Status.	EDSC
12	Migrate Reverb off of old HW	Plan and prep strategies to operate Reverb on existing HW so that it can operate until end of 2017.	COMPLETE	We need to plan for strategies that will allow for some flexibility, since CMR SIT/UAT will not be migrated to the cloud until the end of P14 and support on EVA 4400's end by April 2017. NOTE 3/16: Completed migrating VM storage from EVA 4400's to MSA and added more disk space for dbshared from the MSA.	EI
13	MMT User Testing	Perform beta testing to identify critical feedback to enable PUMP shutdown.	COMPLETE	Beta testing completed on 3/1. Feedback has been collected and a couple of shutdown critical tasks were identified, to be worked in sprint MMT 43.	MMT
13	MMT PUMP Functionality User Testing	Provide feedback to MMT team during MMT functionality testing	COMPLETE		ConfigTools
15	Gap Analysis - Conduit enhancements to address SLCP needs	Determine what changes are required in Conduit to support the on-boarding of SLCP content	COMPLETE	Study complete and Conduit changes presented.	ED
16	EDSC and Reverb Usability Test	Perform EDSC/Reverb comparative study and deliver findings to ESDIS.	COMPLETE	Comparison study findings presented to ESDIS on 3/14. Follow up items have been documented and are being worked.	EDSC
17	2 Factor Authentication	Move Status App and Conduit from ED-Login to Launchpad. Status App Conduit	COMPLETE	Finishing Launchpad integration into Conduit and Status App in production.	ED
17	2 Factor Authentication	Determine feasibility of Bamboo SSO using Launchpad.	NO ISSUE	Investigating connecting Bamboo to Launchpad. Will finish investigation in IP sprint.	ED
17	2 Factor Authentication	Demonstrate 2FA for EED Bamboo on SIT with code 400 RSA.	COMPLETE	The scope of this task is to demonstrate 2FA with code 400 RSA token on EED Bamboo on SIT.	EI
18	DOI Search	Complete DOI Search	COMPLETE	Complete as of 1.67	CMR
19	Remove Anonymous FTP	To provide direction to ECS DAACs instructing how to configure web access to data only through HTTPS	NO ISSUE		ConfigTools
21	Test GDAL/Matrix using the latest GDAL Enhancements for ESDIS (GEE) build and provide results to team	To review and report the results of GeoTiff products that were converted from HDF using the gdal-translate tools delivered with G.E.E 2.0.0	NO ISSUE	HDF conventions are flexible, GDAL HDF drivers are rigid. Current GDAL HDF drivers only work for some NASA products like ASTER/MODIS/OMI The solution is to use a more flexible GDAL HDF driver which is GEE.	ConfigTools
23	Enhance EGI to support the WCS protocol	Support WCS requests from ArcGIS.	ISSUE	Sustaining engineering occupying resources. Lost a half resource during P1. Delay in implementing ArcGIS client connectivity to EDF due to new OS requirements (Windows). Long term solution of integrating OGC's JAXB library into EGI being pursued. Integrating our collections into ArcGIS Server resulting in successful support for WCS in the EDF for a small subset of collections/processing.	SG

24	ARC Curation Support	Ensure enhanced business rules to prevent collection changes from breaking granules (first bullet of capability 24)	COMPLETE	Complete as of 1.69	CMR
24	ARC Curation Support	Cut over collection functionality from umm-lib to umm-spec	COMPLETE	Complete as of 1.69	CMR
25	Improve Search on ED: Related URL Updates	Implement Related URL UMM-C changes	NO ISSUE	Development complete in 1.71	CMR
25	Improve Search on ED: Related URL Updates	Leverage UMM-C on collection details page and add display of Related URLs.	NO ISSUE	CODE COMPLETE: UMM-C now used on collection details page in all environments. Related URLs has been deployed to SIT in 1.41.1.	EDSC
29	GITC: Operational Tools	As ESDIS, I want automated management of GITC (in NGAP) where possible to reduce operational cost/management effort	ISSUE	Issue based on higher priorities (GITC / Cumulus into NGAP) slipping Criteria: <ul style="list-style-type: none"> Scaling policies in place based on load (both increment and decrement) Automated configuration updates based on ingest changes Zero downtime (Blue-Green) and automated service restarts (with tests) 	GIBS / Cumulus
33	Migrate SDPS code to ECC - Building code	To support SDPS custom code installation into a "Mode On Demand" process	NO ISSUE		ConfigTools
35	Migrating from puppet enterprise 3.x to 4.x	Create puppet master server infrastructure	COMPLETE		Puppet Provisioning tools
35	Migrating from puppet enterprise 3.x to 4.x	Migrate base role to 4.x	COMPLETE	This was tested and verified on master. Resolved issue with eyaml.	Puppet Provisioning tools
35	Migrating from puppet enterprise 3.x to 4.x	Migrate Rails profile which includes dependency modules like nginx , postgres etc.	COMPLETE		Puppet Provisioning tools
35	Migrating from puppet enterprise 3.x to 4.x	Achieve 30% or more module conversion	COMPLETE	Note: migrating mmt_app and usr4_app resulted use 30% of modules. No issues/errors were encountered (SIT/UAT/PROD)	Puppet Provisioning tools
35	Migrating from puppet enterprise 3.x to 4.x	Identify and migrate nodes that use only base puppet role	COMPLETE	Note: There are no nodes which use only base role, so we have decided to migrate using roles which inherit base role. So base was migrated for mmt_app and usr4_app.	Puppet Provisioning tools
36	Migrate the CDN to NGAP	Create proof of concept for CDN-architecture in AWS.	COMPLETE		ED
38	EDSC Multi-Select Facets	Implement new facet multi-select functionality using "and" between facets and "or" <u>within</u> facets.	NO ISSUE	CODE COMPLETE: Currently in UAT.	EDSC
42	Developer Portal: Search	Enable EDP Search Capability via GSA	COMPLETE		ED
45	Update SDPS to enable data services for subscriptions prior to delivery	Prepare JAMA requirements review for subscription-based data services.	NO ISSUE		SG
48	ESDIS metrics visualization with EMS	Meet with EMS team to determine if we can use ED-Login to improve EMS Visual Metrics	COMPLETE		ED Login
49	ECC OpenSource Evolution	Conduct Spec Workshop on ECC to determine ESDIS's desired approach to testing and issue tracking of open-sourced projects.	COMPLETE	Notes from Spec Workshop: Earthdata Code Collaborative	ED
62	Clearcase Migration	Modify the current SDPS build process to reduce the size of the VOBs	ISSUE	NCRs 8053446, 8053606, Assigned person didn't have time to complete.	Clearcase Migration

62	Clearcase Migration	Prototype building the SDPS code on a Developer Mac Book to prove it can be done and how long it will take.	COMPLETE	NCRs 8053600, 8053675, delayed waiting on COTS to be available (NCRs 8053446, 8053606). We are working around the issues and making progress. Plan to complete in this last sprint.	Clearcase Migration
	Supports NGAP as a Platform	Bamboo will have support for enforcing compliance checks for EDSC.	ISSUE	Deployment issue discovered late in the PI relating to EDSC deployments to the scanning environment.	Bamboo NGAP
	Supports NGAP as a Platform	Bamboo will have support for enforcing compliance checks for EECS.	COMPLETE		Bamboo NGAP
	Supports NGAP as a Platform	Communicate impacts of Bamboo changes to builds to teams.	COMPLETE	Wiki page has been created and scanning reports were demoed at multiple sprint planning meetings.	Bamboo NGAP